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DATE: Nov. 3/11

V2500-A1 SERIES PROPULSION SYSTEMS SERVICE BULLETIN

This document transmits the Revision 1 of Service Bulletin V2500-ENG-79-0100 and the Initial Issue of Sumitomo Precision Products Service Bulletin 79-2513.

Document History

Service Bulletin Revision Status

Initial Issue Feb. 18/11

Service Bulletin Revision 1

Remove Incorporate Reason for change

All pages of the Pages 1 to 7 of the To revise Service Bulletin. Service Bulletin. Information

To revise the Material Information.
To attach Sumitomo Precision Products Service Bulletin 79-2513.

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Transmittal - Page 1 of 2

CHECK THAT ALL PREVIOUS TRANSMITTALS HAVE BEEN INCORPORATED If any have not been received please advise IAE International Aero Engines AG

Pages 1 to 9 of the Sumitomo Precision Products Service Bulletin 79-2513. Initial Issue.

All pages of the Supplement.

Page 1 of the Supplement.

To add part availability statement.



OIL - INTRODUCTION OF V2500-A5 FUEL COOLED OIL COOLER ON V2500-A1 ENGINES

1. Planning Information

A. <u>Effectivity</u>

- (1) Airbus A320
 - (a) V2500-A1 Engines prior to Serial No. V0362.

B. Concurrent Requirements

R The Service Bulletin that follows must be done at the same time or before this R one:

R V2500-ENG-79-0075 - OIL - FUEL COOLED OIL COOLER - INTRODUCTION OF REVISED FCOC UPPER MOUNT

C. Reason

The Fuel Cooled Oil Cooler (FCOC) P/N 55030001-11 and its associated housing P/N 0F25-003 are no longer available as spare parts.

D. <u>Description</u>

This Service Bulletin introduces the FCOC P/N 55022001-11 and its associated housing P/N 0F32-003 for use on the V2500-A1 engine fleet. This allows a common configuration across V2500-A1 and V2500-A5 engines.

The FCOC, P/N 55022001-11 is similar to P/N 55030001-11 with the differences that follow:

- (1) Additional strengthening around the Low Pressure (LP) filter housing and the LP filter cap. This is to withstand higher cyclic fuel pressures associated with the V2500-A5 engine configuration.
- (2) Deletion of the anti-syphon machining feature and dummy plug with the anti-syphon hole.
- (3) Unit weight, there is an actual weight increase of approximately 1.1 lb (0.5 kg).

<u>NOTE</u>: The Accomplishment Instruction of this Service Bulletin is divided into two INSTRUCTIONs as follows:

INSTRUCTION I - Applicable for engines "In Service".

INSTRUCTION II - Applicable for engines "At Overhaul/Shop Visit".

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E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

F. Approval

The part number changes and/or part modifications described in sections 2 and 3 of this Service Bulletin have been shown to comply with the applicable Federal Aviation Regulations and are FAA-APPROVED for the engine model(s) listed.

G. Manpower

- (1) In Service
 - 4 hours.
- (2) At Overhaul/Shop Visit

Applicable (Hours not affected).

H. Material Availability

(1) Modification Kit is not required.

For prices and availability of future spares, refer to the Supplement of this Service Bulletin.

I. Tooling Availability

New tools are not required.

J. <u>Industry Support Information</u>

Not applicable.

K. Weight and Balance

(1) Weight Change

Plus 1.1 lb (0.5 kg).

(2) Moment Arm

20.4 in (518 mm) forward.

(3) Datum

Engine front mount centerline (Power Plant Station (PPS) 100).

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L. Electrical Load Data

This Service Bulletin has no effect on the aircraft electrical load.

M. Software Accomplishment Summary

Not applicable.

N. References

- (1) Aircraft Maintenance Manual, (AMM) Chapter 79-21-43.
- (2) IAE V2500 Engine Manual (E-V2500-1IA), Chapters 72-00-32.
- (3) Internal Reference No.
- R Engineering Change No. 10VI002, 10VI002-01 and 10VI002A.
- R (4) IAE Service Bulletin V2500-ENG-79-0075
- R OIL FUEL COOLED OIL COOLER INTRODUCTION OF REVISED FCOC UPPER MOUNT.
 - (5) ATA Locator 79-21-43.

0. Other Publications Affected

(1) IAE V2500 Engine Illustrated Parts Catalogue (S-V2500-1IA), Chapter 79-21-43, Fig. 01 will be amended to incorporate the new part number (Refer to paragraph 2. Material Information).

P. Interchangeability of Parts

Not affected.



2. <u>Material Information</u>

A. The kit required consists of the following parts:

None.

R

B. Parts to be reworked:

Refer to paragraph 2.C. New production parts.

C. New production parts:

FIG	NEW	QTY	PART	TITLE	MAT	OLD	INSTR
ITEM	PART					PART	DISP
NO.	NO.					NO.	

79-21-43

	17 21 45	•					
R	01-100	55022001 -11	1	.Fuel Cooled Oil Cooler (FCOC)	-	55030001 -11	(S1)(A)(B)(1D)
R						or	
R						55025001	(S1)(A)(B)(1D)
R						-1	
R						or	
R						0F25-001	(S1)(A)(B)(1D)
R						(500002)	
R						or	
R						0F25-101	(S1)(A)(B)(1D)
R						(500039)	
R						or	
R						0F25-201	(S1)(A)(B)(1D)
R						or	
R						0F25-301	(S1)(A)(B)(1D)

D. <u>Instruction disposition codes:</u>

- (S1) Old and new parts are fully interchangeable.
- (A) The new part is currently available for sale.
- (B) The old part is no longer available for sale.
- R (1D) Old standard of unit may be reworked.



3. Accomplishment Instructions

- A. Rework Instructions
- The old standard parts can be reworked to the new standard by incorporating the R R
 - attached Sumitomo Precision Products Service Bulletin 79-2513. The engine
- R mounting bracket must be reworked to the new standard. Service Bulletin
- V2500-ENG-79-0075 must be incorporated prior to or at the same time as this R
- R Service Bulletin.
 - B. Assembly Instructions

INSTRUCTION I - Applicable for engines "In Service".

(1) General

CAUTION:

IN ORDER TO REDUCE THE POTENTIAL FOR MULTIPLE ENGINE IN-FLIGHT SHUT DOWN, POWER LOSS, OR OTHER ANOMALIES DUE TO MAINTENANCE ERROR, IAE RECOMMENDS THAT OPERATORS AVOID PERFORMING MAINTENANCE ON MULTIPLE ENGINES INSTALLED ON THE SAME AIRCRAFT AT THE SAME TIME. IF IT IS NOT POSSIBLE TO AVOID MAINTENANCE ON MORE THAN ONE ENGINE AT THE SAME TIME, IAE RECOMMENDS THAT ADDITIONAL CONTROLS BE APPLIED IN ORDER TO ENSURE THAT MAINTENANCE TASKS HAVE BEEN COMPLETED AS DEFINED. MAINTENANCE GUIDELINES SHOULD BE REVISED WHERE POSSIBLE, TO PROMOTE THIS RECOMMENDATION.

DO NOT TOUCH THE ENGINE COMPONENTS FOR A SHORT TIME AFTER THE ENGINE WARNING: IS SHUT DOWN. THE COMPONENTS STAY HOT AND CAN CAUSE INJURY.

- (a) Obey all WARNINGS and CAUTIONS in the procedures that are referred to.
- (b) Consumable Materials
 - (i) Refer to the related Manual tasks given in this instruction.
- (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- Get access to the Fuel Cooled Oil Cooler (FCOC) that is installed on the left side of the fan case
 - (a) Open the applicable fan cowl doors (Refer to the Aircraft Maintenance Manual, Chapter 71-13-00 Opening/Closing).
- Remove the FCOC from the engine (Refer to the Aircraft Maintenance Manual, Chapter 79-21-43)
 - (a) Remove the old FCOC (79-21-43, 01-100), P/N 55030001-11, P/N 5U0002, P/N 55025001-1, P/N 0F25-001, P/N 0F25-101, P/N 0F25-201 or P/N 0F25-301.

R R

R



R

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- (4) Install the FCOC on the engine (Refer to the Aircraft Maintenance Manual, Chapter 79-21-43)
 - (a) Install the new or reworked FCOC (79-21-43, 01-100), P/N 55022001-11.
- (5) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.
- (6) Close the access to the FCOC
 - (a) Close the applicable fan cowl doors (Refer to the Aircraft Maintenance Manual, Chapter 71-13-00 Opening/Closing).
- (7) Do an idle leak check (Refer to the Aircraft Maintenance Manual, Chapter 71-00-00).

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INSTRUCTION II - Applicable for engines "At Overhaul/Shop Visit"

(1) General

R

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- (a) Obey all the WARNINGS and CAUTIONS in the procedures that are referred
- (b) Consumable Materials
 - (i) Refer to the related Manual tasks given in this instruction.
- (c) Tools and Equipment
 - (i) Refer to the related Manual tasks given in this instruction.
- (2) Remove the FCOC from the engine (Refer to the Engine Manual, Chapter 72-00-32)
 - (a) Remove the old FCOC (79-21-43, 01-100), P/N 55030001-11, P/N 5U0002, P/N 55025001-1, P/N 0F25-001, P/N 0F25-101, P/N 0F25-201 or P/N 0F25-301 from the engine.
- (3) Install the FCOC on the engine (Refer to the Engine Manual, Chapter 72-00-32)
 - (a) Install the new or reworked FCOC (79-21-43, 01-100), P/N 55022001-11 on the engine.
- (4) Make sure that the work area is clean and clear of tools, equipment and other unwanted materials.
- C. Recording Instructions
 - (1) A record of accomplishment is required.



OIL - INTRODUCTION OF V2500-A5 FUEL COOLED OIL COOLER ON V2500-A1 ENGINES

SUPPLEMENT - PRICES AND AVAILABILITY

The prices (if shown) are for estimating purposes only and as such are given in good faith, without commercial liability for advanced planning purposes only. Refer to IAE Spares and/or current price catalogue for current prices.

1. New Production Parts:

Unit Price

Part No. Description US Dollars

55022001-11 Fuel Cooled Oil 64,570.00

Cooler (FCOC)

R Part is currently available for sale.

2. Tools

None.



OIL - FUEL COOLED OIL COOLER (FCOC) - A1 FCOC modification to A5

FCOC -

1. Planning Information

A. Effectivity

Fuel Cooled Oil Cooler for V2500 A1Engines

Part Number

OF25-001

OF25-101

OF25-201

OF25-301

55025001-1

55030001-11

B. Concurrent Requirement

None

C. Reason

The current A1 FCOC Housing (P/N OF25-003) casting part is no longer available from the current sub-supplier.

D. Description

A1 FCOC Housing change, modify the A1 FCOC unit to A5 FCOC latest configuration P/N 55022001-11.

E. Compliance

Category Code 7

Accomplish when the supply of superseded parts has been depleted.

F. Approval

(1) The technical contents of this Service Bulletin 79-2513 has been approved by IAE.

G. Manpower

Estimated man-hours to accomplish this Service Bulletin.

(1) In Service

Not affected.

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Not subject to the EAR per 15 C.F.R. Chapter 1, Part 734.3(b)(3).



(2) At overhaul

Not affected.

NOTE: The parts affected by this Service Bulletin are accessible at repair and overhaul.

H. Material Price and Availability

The parts that are necessary to do this Service Bulletin Procedures are in section 3, Material information.

I. Tooling price and Availability

Not affected.

J. Weight and Balance

Weight change Plus 2.93LBS (1.33KG)

Guarantee weight for A1 FCOC: 21.41 LBS (Ref.)

(P/N OF25-001, OF25-101, OF25-201, OF25-301, 55025001-11 55030001-11)

Guarantee weight for A5 FCOC: 24.34 LBS (Ref.)

(P/N OF32-001, OF32-101, 55022001-1, 55022001-11)

K. Electrical Load Data

Not affected.

L. References

- (1) IAE Service Bulletin V2500-ENG-79-0100
- (2) Component Maintenance Manual (CMM), 79-21-43

M. Other Publications Affected

None.

N. Interchangeability of Parts

Not affected.

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2. Accomplishment Instructions

Select one of the following accomplishment instructions (A-G) depending on the FCOC P/N to be converted to FCOC P/N 55022001-11.

A. To change A1 FCOC P/N OF25-001 to most upda	ted A5 FCOC configuration P/N 55022001-11 use
the following procedures.	

- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Matrix to Matrix P/N OF29-002.
- (4) Change Header to Header P/N 55022004-1.
- (5) Change Cap Assy to Cap Assy P/N 55022005-1 and add Adapter P/N 55022006-1.
- (6) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (7) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

<u>w Part Number</u>
022001-11

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- B. To change A1 FCOC P/N OF25-101 to most updated A5 FCOC configuration P/N 55022001-11 use the following procedures.
- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Header to Header P/N 55022004-1.
- (4) Change Cap Assy to Cap Assy P/N 55022005-1 and add Adapter P/N 55022006-1.
- (5) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (6) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

Old Part Number	New Part Number
OF25-101	55022001-11

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- C. To change A1 FCOC P/N OF25-201 to most updated A5 FCOC configuration P/N 55022001-11 use the following procedures.
- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Matrix to Matrix P/N OF29-002.
- (4) Change Header to Header P/N 55022004-1.
- (5) Change Cap Assy to Cap Assy P/N 55022005-1 and change Adapter to Adapter P/N 55022006-1.
- (6) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (7) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

Old Part Number New Part Number

OF25-201 55022001-11

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- D. To change A1 FCOC P/N OF25-301 to most updated A5 FCOC configuration P/N 55022001-11 use the following procedures.
- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Header to Header P/N 55022004-1.
- (4) Change Cap Assy to Cap Assy P/N 55022005-1 and change Adapter to Adapter P/N 55022006-1.
- (5) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (6) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

Old Part Number	New Part Number
OF25-301	55022001-11

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- E. To change A1 FCOC P/N 55025001-1 to most updated A5 FCOC configuration P/N 55022001-11 use the following procedures.
- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Cap Assy to Cap Assy P/N 55022005-1 and add Adapter to Adapter P/N 55022006-1.
- (4) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (5) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

Old Part Number	New Part Number
55025001-1	55022001-11

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- F. To change A1 FCOC P/N 55030001-11 to most updated A5 FCOC configuration P/N 55022001-11 use the following procedures.
- (1) Disassemble the A1 FCOC unit in accordance with the disassembly section of CMM, Chapter 79-21-43.
- (2) Remove the A1 Housing Assy (P/N OF25-003) and prepare new A5 FCOC Housing Assy (P/N OF32-003).
- (3) Change Cap Assy to Cap Assy P/N 55022005-1 and change Adapter to Adapter P/N 55022006-1.
- (4) Replace name plate and screws to new name plate (P/N 55022011-5) and screw (P/N MS21318-7). Before replacing, mark the original Serial Number on the new name plate.
- (5) Conduct Leak Check in accordance with the test section of CMM 79-21-43.

Old Part Number	New Part Number
55030001-11	55022001-11

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3. Material information

New PN	Qty	Estimated	Key Word	CMM	SB number
		Price			(reference)
		(US \$)			
OF29-002	1	7,573.00	Matrix	79-21-43	79-2503
OF25-015	4	47.38	Packing	79-21-43	79-2503
55022105-3	1	2,976.00	Сар	79-21-43	79-2510
MS21209F4-25L	1	14.42	Lock Insert	79-21-43	79-2510
55022106-3	1	3,836.00	Adaptor	79-21-43	79-2510
MA4018-084	1	31.93	Dowel Pin	79-21-43	79-2510
55030012-3	6	148.00	Hexagon	79-21-43	79-2510
			Socket Bolt		
AS32223	12	179.00	Dee Head Bolt	79-21-43	79-2510
MS21209F5-25L	6	12.36	Lock Insert	79-21-43	79-2510
MS9321-10	12	0.41	Washer	79-21-43	79-2510
NAS1805-4P	12	17.51	Lock Nut	79-21-43	79-2510
OF25-014	2	114.00	Packing	79-21-43	79-2510
OF25-016	1	40.17	Packing	79-21-43	79-2510
OF25-020	1	50.47	Packing	79-21-43	79-2510
OF25-021	1	33.99	Packing	79-21-43	79-2510
55022004-1	1	1,706.00	Header Assy	79-21-43	79-2507
OF32-150	2	55.62	Bushing	79-21-43	79-2507
OF32-151	1	55.62	Bushing	79-21-43	79-2507
55022011-5	1	9.37	Identification	79-21-43	79-2513
			Plate		
MS21318-7	4	0.52	Screw	79-21-43	79-2513

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SERVICE BULLETIN FEEDBACK FORM

Please use this form to give feedback on the quality of this Service Bulletin. The input you provide will be used to analyse areas of improvement and to take action to further improve on the quality of our Service Bulletins.

We thank you for the time you spent in completing this form.

Please rate on a scale of 1 to 5, with 5 being the highest score:

- General quality rating of this Service Bulletin - Quality rating of the Accomplishment Instructions

- Quality rating of the Illustr	ation		□ 3 □ 4 □ 5			
- Is this Service Bulletin easy	y to understand?	☐ Yes	□ No			
If you have had difficulties to perform this Service Bulletin please quote below the area(s) and give a short description of the issue:						
Planning In		Material Information	Accomplishment Instruction			
Section	on:	Section:	Section:			
□ 1.A.	□ 1.I.	□ 2.A.	☐ General			
□ 1.B.	☐ 1.J.	□ 2.B.	☐ Get Access			
☐ 1.C.	□ 1.K.	□ 2.C.	☐ Removal/Installation			
□ 1.D.	□ 1.L.	□ 2.D.	Inspection			
□ 1.E.	□ 1.M.	□ 2.E.	☐ Test			
☐ 1.F.	□ 1.N.	□ 2.F.	☐ Close the Access			
☐ 1.G.	□ 1.0.		☐ Log Book Entry			
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Explanatory notes:						
Operator:		Overhaul Site:				
Name/Title:		Date:				

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